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ABSTRACT

The author tests the proposition that an educational program containing a minimum amount of failure will help the student to achieve a favorable self-attitude. Based on the belief that early experience of success leads to a healthy self-concept, it is hypothesized that children in an Individually Prescribed Instruction Program (IPI) should have a significantly higher self-concept than children in traditional programs. The self concepts of groups of third, fifth and sixth graders enrolled in IPI programs are compared. Statistical analyses of the data shows that students who have been in IPI programs three years have significantly lower self concepts than students who have been in IPI programs one or two years. A cautious interpretation of this finding is urged. A review of the literature related to self-concept is included. (TL)

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# THE SELF CONCEPT OF STUDENTS IN INDIVIDUALLY PRESCRIBED INSTRUCTION

Karin R. Myers

## INTRODUCTION

I am my environment.
Much is combined to shape me
Into what I am today.
I am feelings, ideas,
Hopes, fears and fantasies.
Everyone I meet helps to form me.
With careful handling I could be
A lovely piece of pottery
Useful to many.
Poor handling could cause
A warped, ugly, useless thing
To be.
How have you handled me today?
L 71

Human behavior may be observed from at least two very broad frames of reference from the view of an outsider, or from the view of the individual himself. The poem above is an example of the second approach which attempts to understand the behavior of the individual in terms of self perceptions. This approach has been called the perceptual, personal or phenomenological frame of reference. This definition is the one that will be used in this study.

Self concept, or phenomenology, holds that reality lies not in the event but in the individual's experience of the event, or the phenomenon. How events are perceived is largely determined by the individual's self concept. This in turn influences the roles that individuals fulfill in their various life situations. A person learns about himself through success or failure in manipulating the physical environment, and from the reaction of others.

The concepts of self held by the individual determine the percep-

tions he will have of any particular event. Out of all the perceptions possible at any moment, only those which are appropriate and consistent with the phenomenal self are available to him. This selective process determines the roles people play in any life situation (Combs and Snygg, 1959).

In educational settings, the concept of self develops to a large extent out of the classroom situation--how the individual performs and how others view him and his productions and achievements (Drews, 1963). The child who is not regarded as bright by those with whom he comes into contact sees himself as slow or incapable of high achievement and retains this concept when he goes to school (Kurtz, 1959). Repeated failure in school or in intellectual competition will gradually change the individual's judgment from "I am capable" to "I am incapable." This will happen unless some means is found to reduce the anxiety induced by failure. The alternatives may be some form of self-delusion.

The peer group is also an important frame of reference. Similarly, the self concept (as it relates to ability and interest in school learning) has, as its frame of reference, the classroom (Drews, 1963). Basic to the acquisition of adequate and accurate self concepts at school is the teacher who accepts each child as a unique person and who helps him in his growth toward self-realization (Bledsoe, 1962).

## Statement of the Problem

Self concept is a function of experience. Failure is a state of feeling, attitude, and perhaps belief that an individual acquires through

repeated social experience. Discouragement induced by repeated failure leads to a lowering of effort and hence leads to poorer performance on a later task without any active repression. Zeaman and House (1970) studied the phenomenon "failure set." Trainable mentally retarded subjects suffering prolonged failure on a problem which proved to be insoluble were found then to be unable to solve the simplest problem, although they had previously been able to do so.

Failure discourages a person's effort. It creates a strong distaste for what he must attempt to do. In the school, the pupil's dislike for reading, arithmetic, algebra, music, literature, science, or any other area can usually be traced back to educational failure of one kind or another. The pupil fails to get the meaning, fails to accomplish what he sets out to do, and fails to understand what his tasks require of him. In consequence, he lacks the interest that would impel him to continue (Wheat, 1955). If an adolescent fails in school and is viewed as a failure by his teacher and classmates, the worst problem is the damage to his assessment of himself.

## Purpose

In this study, the investigator is testing the proposition that an educational program containing a minimum amount of failure will help the student achieve a favorable self-attitude. The educational program chosen is the Individually Prescribed Instruction (IPI) program developed at the Baldwin-Whitehall School District in Pittsburgh, Pennsylvania.

It is hypothesized that early experience of success leads to a healthy self concept. IPI is geared to individual success (more so than

traditional programs). Therefore, children in IPI should have significantly higher self concept as measured by variable Q3 of the IPAT (Institute for Personality and Ability Testing) Children's Personality Questionnaire (CPQ) than children in traditional programs.

The objectives of this study are:

1. To assess the self concepts of groups of third-grade children and groups of fifth- and sixth-grade children.

2. To compare the self concepts of third and fifth- and sixth-grade children by age, sex, achievement level and years in IPI.

3. To compare the self concepts of third and fifth- and sixth-grade IPI students with those of third and fifth- and sixth-grade non-IPI students.

There are several limitations to this study. The concept of self is subject to change--either through maturation, perception, or education. This study has geographical limitations--children in cultural or geographical areas other than Illinois, Ohio, and Pennsylvania may show different results. This study is limited to those aspects of self concept which can be measured by the CPQ. Finally, there is the inherent limitation in self report measures--how honest and objective students will be in reporting is always a factor.

## Review of Related Research

### Self-Concept

The self-concept term is as common today in the behavioral science field as ego was twenty or more years ago. A variety of definitions have been given for self concept. Perkins (1958) described it as those perceptions, beliefs, feelings, attitudes, and values which the individual views as describing himself. McCandless (1961) wrote: "The self-concept may be thought of as a set of expectancies, plus evaluations of the areas of behaviors with reference to which these expectancies are held." Combs and Snygg (1959) said that self-concept is the individual's "attempt to reduce his self organization to its essence so that he may be able to perceive and manipulate it effectively."

Silver (1958) noted that the level and stability of self-concept

rating is significantly associated with paternal acceptance and to a lesser degree with maternal acceptance. Tatum (1957) pointed out that there was a significant relationship between what appears to be the parents' acceptance of their children and the way children regard themselves and are regarded by their peers. The self develops out of social definition of the individual's relationship to the world about him. As other people important in his life define and evaluate the person, so will he come to define and evaluate himself.

Gordon (1969, p. 387) states:

> Although the child's view of himself does not mirror and is not an exact replica of his world's picture of him, for many youngsters it comes quite close. If the larger society conceives of the child as not worthwhile and demonstrates consistently to him that it so judges him, it is difficult for the child to value himself. Children in the ghetto, children classified as slow learners, children who for a variety of reasons are told even in these early years that they are not quite good enough or smart enough or handsome enough tend to devalue themselves and thus to set the stage for continuously poorer levels of performance than might otherwise be their lot.

Lecky (1945) proposed that preserving one's perception of one's self intact was the prime motive in all behavior. The hypothesis that acceptance of self is positively related to acceptance of others is supported by the studies of Berger (1952), Marshall (1958), Phillips (1951), and others.

Bledsoe and Garrison (1962) point out that the role of the school, and that of the teacher, is of utmost importance in the creation of a climate favorable to the development of a healthy concept of the self. Unhealthy influences can develop in the school setting that may adver-

sely affect the self-concept. The failures, reminders of limitations, and the rejection which students face at school are often artificial and forced. Jersild (1952) suggests these may have the effect of humiliating the student by depreciating his worth in a manner that does no good to society and does the individual great harm.

Students tend to develop self concepts that reflect the patterns of reinforcement. Consistent praise can become so stultifying that it ceases to be effective. Consistent blame, however, is more likely to be damaging to the individual over very long periods of time (Wilson, Robeck, and Michael, 1969).

A study by Fink (1962) related self-concept to academic achievement and the findings for boys supported the hypothesis that an adequate self-concept is related to high academic achievement and an inadequate self-concept is related to low academic achievement; the results for girls weren't as positive. The self-concept study by Roth (1959) suggests that individuals have a definite investment to perform as they do--those who do not achieve choose not to do so, while those who do achieve choose to do so.

Gaskill (1970) evaluated the self concepts of IPI and non-IPI students. There appeared to be little difference between the attitudes and self concepts of the two groups, except in the low ability groups, for he noted:

> All of the low ability IPI students showed a better attitude toward school and a better self concept than did the low ability non-IPI (p. 80).

This may be because average and superior students have a fairly well established view of self in classroom learning, whereas the slow learner's self concept is much less stable. The attitude of the slow learner may vary from one situation to another. All this must be kept in mind so the slow learner can be given work he can do and the safety to try before he will begin to use the abilities he has (Drews, 1963).

Self concept, anxiety, and the ability to engage in deliberate thinking are closely interrelated. Mussen (1963) states that anxious, fearful children have difficulty concentrating on academic tasks and may then perform poorly on intelligence tests.

Self-concept development might be considered the main task of education, according to Symonds (1951, p. 183). He says that: "Education should be concerned with helping individuals make better adjustments to their physical and social surroundings. Education should be concerned with more effective perceiving, more effective thinking and more effective acting."

Individually Prescribed Instruction

Studies by Bialeck and Castro (1968), Fisher (1967), Gallagher (1968), and Research for Better Schools (1968) show that on standard achievement tests IPI students do as well as non-IPI students. Some statistical differences on standard achievement tests were found to be occurring in favor of IPI pupils in special education and reform schools (Research for Better Schools, 1969). Bialeck and Castro (1968)

found that low ability students found IPI more attractive than did non-IPI students. Gaskill (1970) found that all of the low ability IPI students showed a better attitude toward school and a better self concept than did the low ability non-IPI students. Janove (1968) showed that Elk Grove, Illinois IPI students indicated slightly more positive attitudes toward reading and math than did non-IPI students. He also found that IPI students showed more favorable attitudes toward IPI math and IPI reading than to general math and reading.

Many of the problems encountered in evaluating the IPI program are the same as those encountered in attempting to evaluate any new program--lack of adequate measurement instruments and the span of time. Standard achievement tests measure less than 30% of the IPI skills. Because of this many evaluative instruments have to be invented. To date over 100 studies have been generated. The data do not always agree. This could be due to the lack of effective evaluation instruments, the variation in study objectives, or due to the errors of the evaluators. Disagreements are apt to arise when value judgments are made (Research for Better Schools, 1969).

Teacher Effects

A study of teacher effects assumes that they remain constant across classes and from year to year. The assumption is also made that some pupil reactions (achievement, self concept, etc) can be correlated to the teachers' actions (classroom behavior).

In a review of research in this area, Rosenshine and Furst (1971)

admit that very little is known about the relationship between classroom behavior and student growth.

> "Even if consistent and significant linkages between classroom behavior and student outcome measures were established, one would need clear statements on the optimum frequencies for behaviors...(Rosenshine, 1970, p. 295)."

McGaw (1969) analyzed and compared five classroom observation systems. In examining the reliability and validity of these systems he observed that:

> "measures of inter-judge agreement while related to reliability provide indices of the objectivity of observation schemes rather than measures of their reliability (p. 89)."

A number of methodological problems were considered on the question of validity. These problems cast doubt on the content validity of the observational systems.

At the present time more than 200 classroom observation and rating systems have been reported. This proliferation of systems cannot be called a development of useful knowledge about teaching unless the systems are validated. The history of the past ten years has shown that subsequent validation is not done. Unless validation evidence is available, a new investigator does not need to pay attention to category systems that have been developed by others. His guess is as good as that of anyone else about what classroom behaviors are worth considering. Whether these observed differences (or similarities) have any educational significance is not answered in the development of a category system (Nuthall, 1970).

Rosenshine's (1969) review of teacher effects finds no consistent

patterns. There are some indications that certain areas of teacher behavior are consistent across the years. "If teachers are consistent in their behavior but inconsistent in their effects, then it is no wonder that research in this area becomes so bewildering and difficult" (Rosenshine, 1969, p. 7). This could account for Lewy's (1969, p. 110) statement that..."from the administrative point of view the IPI program imposes on each child a set of classroom behavior which remove him, to a certain degree, from a constant and incessant monitoring and supervision of the classroom teacher." This may be the reason that Wilson (1970) suggests that IPI is so effective that the effects of differences among teachers are overcome. Rosenshine (1970) comes to the conclusion that there is greater variation in student or teacher behavior within curricula than among curricula.

## MEASURES

In developing this study it was decided to study as many elements that affect the self concept of elementary students as would be possible in a limited period of time.

The study areas finally chosen were student self concept, sex, achievement, number of years in IPI, and the classroom. The background information on each subject was obtained from the school records. The instrument selected to survey the students' self concept was:

> IPAT CHILDREN'S PERSONALITY QUESTIONNAIRE (THE CPQ) by Rutherford B. Porter and Raymond B. Cattell, Institute for Personality and Ability Testing, Champaign, Illinois, 1959 (Revised 1963 and in process of being revised in 1971).

### Subjects

The subjects selected in this study were third, fifth, and sixth grade Individually Prescribed Instruction (IPI) students chosen from middle class school districts in Illinois, Ohio, and Pennsylvania.

The IPAT Children's Personality Questionnaire (CPQ) was normed on age and sex. Two age categories were set up: (1) ages 8 to 10.5, and (2) ages 10.5 to 13. Because of the age differences in the norm group, the fifth and sixth grade students were collapsed into one group and the third graders became the second group. Since IPI has been in

progress for only three years, there is a scarcity of fifth and sixth graders in the program. By collapsing the fifth and sixth grade students into one group it became easier to compare them with the third graders.

The Institute for Personality and Ability Testing used 2,834 students (1,420 girls and 1,414 boys) to norm the CPQ. These norms were then used as the control subjects in this study.

The final selection of fourteen third grade classrooms and fourteen fifth and sixth grade classrooms yielded 700 subjects. A more complete breakdown follows:

Table 1

Subject Breakdown

| | ACH. | | | YRS: IPI | | | SEX | | |
|---|---|---|---|---|---|---|---|---|---|
| Grade | 1 | 2 | 3 | 1 | 2 | 3 | M | F | Total |
| 3rd | 99 | 169 | 79 | 46 | 64 | 237 | 166 | 181 | 347 |
| 5th + 6th | 99 | 144 | 114 | 32 | 145 | 180 | 192 | 165 | 357 |
| TOTAL | 198 | 313 | 193 | 78 | 209 | 417 | 358 | 346 | 704 |

## Method

This study was comparative in nature, attempting to find the difference (if any) in self concept of IPI students in the third, and fifth and sixth grades. The self-concept was analyzed in relation to student sex, achievement, years in IPI, and the classroom.

As the students progress through the various levels of the IPI program, self concept patterns may be evolving that are characteristic of the high and of the low achievers. The emerging self concept patterns may indicate some of the forces that seem to influence these students.

Cooperation was solicited and given by the administration and teachers of the cooperating school districts. School records provided the necessary background information on each subject. Care was taken to protect the anonymity of the students. In order to do this, the questionnaires that were used by the investigator contained only code numbers of the students and not their names. A list of code numbers and names was kept on file at the school in the event that the investigator might wish to obtain other information or do a follow-up at some future time. This procedure permits the investigator to examine the data without knowing the identity of the individual students; the records kept at the school contain the code number but not the data obtained.

The self concept was measured by the IPAT Children's Personality Questionnaire (The CPQ) administered by the investigator the first week of February. Nothing was done to condition the students. They were told that this was a survey to establish students' attitudes and did not count on their report cards.

The CPQ was administered to students in their normal classroom grouping. Students were assured that their responses would remain anonymous and not be shared with the school personnel except as group results. Confidentiality was achieved by printing the code number at the top of the page of personal history and also at the lower half of

the page. Students were asked to print their name in the appropriate space on the bottom half of the page and this was later torn off. This part of the sheet was left with the school. A copy of the form may be found in Appendix B. Because this is not a reading test, the test manual states that the entire test may be read aloud to young children. The investigator found that this was necessary with all of the third grades and individual students in the fifth and sixth grades. After the students completed the questionnaire, the investigator followed the instructions for administration of the test which were found in the test manual.

Due to the complexity and time involved in correctly using a classroom interaction schedule, the investigator did not attempt to use one at the time of testing. Had there been any classrooms that varied significantly in their mean self concept profiles, the investigator would have then reentered these classrooms plus a random selection of the non-deviate classrooms with an appropriate observation instrument.

## SUMMARY

The conclusions one can draw from this study must be considered in light of the limitations listed in the introduction. Since the purpose of the study is to examine the self concept of groups of IPI students, it should be emphasized that these groups may not be typical of the larger groups from which they were drawn. For this reason conclusions should be drawn concerning only these IPI students and not concerning IPI students in general.

This investigator attempted to show whether an educational program that is designed with a minimum amount of failure would help the student achieve a higher self concept. However, the statistical analyses

of the data showed that students who have been in IPI programs three years have significantly lower self concepts than students who have been in IPI programs one or two years (see Table 2.) Figure 1 illustrates these differences graphically.

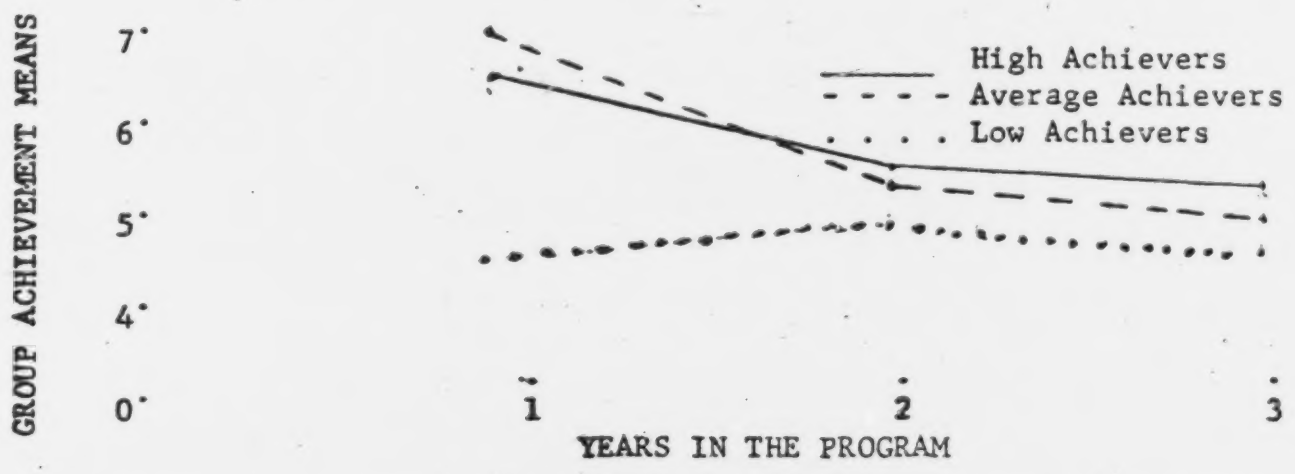


Figure 1. A Graphic Representation of Group Means of Students By Achievement Levels and Years in IPI.

Table 2

Means and Analysis of Variance of Student Achievement By Number of Years in IPI on Variable Q3

| | MEANS OF STUDENT ACHIEVEMENT BY NUMBER OF YEARS IN IPI | | | | | |
|---|---|---|---|---|---|---|
| | 1 YEAR IPI | | 2 YEARS IPI | | 3 YEARS IPI | |
| | N | $\bar{X}$ | N | $\bar{X}$ | N | $\bar{X}$ |
| HIGH ACHIEVERS | 18 | 6.305 | 30 | 5.618 | 41 | 5.463 |
| AVERAGE ACHIEVERS | 20 | 6.816 | 36 | 5.471 | 43 | 5.390 |
| LOW ACHIEVERS | 18 | 4.860 | 27 | 5.034 | 40 | 4.895 |

| | ANALYSIS OF VARIANCE OF STUDENT ACHIEVEMENT BY NUMBER OF YEARS IN IPI | | | |
|---|---|---|---|---|
| | DF | MS | F | P |
| TOTAL | 272 | | | |
| BETWEEN | 8 | 11.48 | | |
| ACHIEVEMENT | 2 | 22.84 | 7.766 | 0.0008 |
| YEARS OF IPI | 2 | 12.92 | 4.394 | 0.0131 |
| ACHIEVEMENT BY YEARS | 4 | 5.07 | 1.724 | 0.1436 |
| ERROR (WITHIN) | 264 | 2.94 | | |

This tends to indicate that for these students enrollment in these IPI programs has not helped them achieve a higher self concept. It has lowered their self concept. Some readers may argue that the lowering of self-concept across years in IPI may be an artifact of the Q3 variable, and that Q3 measures increasing reality orientation. Under such an argument, one would expect that because of the constant feedback on their progress, students in IPI would be expected to have self-concept scores which decrease with years in the program. However, such an argument is untenable when one looks at the additional data: high-achieving students had significantly higher self-concepts than low-achieving students, and older students had higher self concepts than younger students. These two bits of evidence suggest that as students become older and/or more mature, their self-concept becomes higher. In light of these results, the fact that students who had IPI for two or three years had lower self concepts than those who were in their first year of IPI instruction, and the fact that these results were consistent across high achieving and average achieving students, suggests that the IPI program itself may be causing these decreasing perceptions of self.

However, one must be cautious with the interpretation of this finding because the data are from a cross-sectional, not a longitudinal study. There could be several reasons for this finding: IPI may not be geared to individual success (any more so than traditional programs); the teachers may not be teaching IPI as its founders recommend; there may be no school program that is able to provide the experience of success that leads to a high self concept. This investigator will not

attempt to hypothesize which if any of the above reasons caused the apparent lowering of the students self concept. This should be done in another study. A follow-up study of the same students would be preferable. A study of a different sample of IPI students using the CPQ might also prove interesting. The techniques developed in this study may be of use in facilitating further investigation in this area.

## LIST OF REFERENCES

Berger, E. M. The relation between expressed acceptance of self and expressed acceptance of others. Journal of Abnormal Psychology, 1952, 47, 778-782.

Bialek, H. M., and Castro, A. A second year evaluation of individually prescribed instruction (IPI). Unpublished report, Monterey, California, 1968.

Bledsoe, J., and Garrison, K. C. The self concepts of elementary children in relation to their academic achievement, intelligence, interests, and manifest anxiety. Cooperative Research Project No. 1008. Athens: The University of Georgia, 1962.

Bolvin, J. O., Lindvall, C. M., and Scanlon, R. G. A manual for the IPI institute. Pittsburgh, Pennsylvania: Learning Research and Development Center, University of Pittsburgh and Research for Better Schools, Inc., 1967.

Combs, A. W., and Snygg, D. Individual behavior. New York: Harper & Brothers, 1959.

Drews, E. M. Student abilities, grouping patterns and classroom interaction. East Lansing, Michigan: College of Education, Michigan State University, 1963.

Fink, M. B. Self concept as it relates to academic underachievement. California Journal of Education Research, 1962, 13, 57-62.

Fisher, J. R. An investigation of three approaches to the teaching of mathematics in the elementary school. (Doctoral dissertation, University of Pittsburgh) Ann Arbor, Michigan: University Microfilm, 1967. No. 68-7841.

Gallagher, P. K. The evaluation of student achievement in the individually prescribed program in mathematics at the Frank A. Berry School, Bethel, Connecticut. Graduate School of Education, Fairfield University, 1968.

Gaskill, E. A. An evaluation of individually prescribed instruction in the primary grades of the Urbana Schools. Unpublished doctoral dissertation, Illinois State University, 1970.

Gordon, J. J. The beginnings of the self: The problem of the nurturing environment. Phi Delta Kappan, 1969, 50, 375-378.

Janove, E. Individually prescribed instruction: A study of independent behavior. Unpublished report, Elk Grove Illinois School District, 1969.

Jersild, A. T. In search of self. New York: Teachers College, Columbia University, 1952.

Jones, S. H., and Daly, J. K. IPI keys to individualization. Pittaburgh, Pennsylvania: Baldwin-Whitehall Public Schools, 1968.

Kurtz, J. J., and Swenson, E. Factors related to overachievement and underachievement in school. In J. French (Ed.), Educating the gifted. New York: Holt, Rinehart and Winston, 1959. Pp. 402-410.

Lecky, P. Self-consistency: A theory of personality. New York: Island Press, 1945.

Lewy, R. A. Individually prescribed instruction and academic achievement. A report on an experimental project submitted to the State of Illinois, Department of Program Development for Gifted Children, March, 1969, Arlington Heights, Illinois.

Marchall, R. J. Variation in self attitudes and attitudes toward others as a function of peer group appraisals. (Doctoral dissertation, University of Buffalo) Ann Arbor, Michigan: University Microfilm, 1958. No. 58-1947.

Mussen, P. H. The psychological development of the child. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.

McCandless, B. R. Children and adolescents. New York: Holt, Rinehart and Winston, 1961.

McGaw, B. Classroom observation studies: A theoretical analysis. Unpublished honours dissertation, University of Queensland, 1969.

Nuthall, G. A., and Rosenshine, B. The proliferation of classroom behavior category systems. Unpublished manuscript, University of Illinois at Urbana, 1970.

Perkins, H. V. Factors influencing change in children's self concepts. Child Development, 1958, 29, 221-230.

Phillips, E. L. Attitudes toward self and others: A brief questionnaire report, Journal of Consulting Psychology, 1951, 15, 79-81.

Research for Better Schools. A progress report: Individually prescribed instruction. Philadelphia, Pennsylvania: Research for Better Schools, Inc., 1969.

Research for Better Schools. IPI evaluation summary 1967-68: Status report. Philadelphia, Pennsylvania: Research for Better Schools, Inc., 1968.

Rosenshine, B., and Furst, N. Current and future research on teacher performance criteria. In B. O. Smith (Ed.), Research on teacher education; A symposium. Englewood Cliffs, New Jersey: Prentice-Hall, 1971.

Rosenshine, B. Evaluation of classroom instruction, Review of Educational Research, 1970, 40, 279-301.

Rosenshine, B. The consistency of teacher effects. Unpublished manuscript, Temple University, 1969.

Roth, R. M. Role of self concept in achievement, Journal of Experimental Education. 1959, 27, 265-281.

Silver, A. W. The self concept: Its relationship to parental and peer acceptance. (Doctoral dissertation, Michigan State University) Ann Arbor, Michigan: University Microfilm, 1958. No. 58-2331.

Soar, R. S. An integrative approach to classroom learning: Final Report. Public Health Service Grant No. 5-R11-MH 01096 and National Institute of Mental Health Grant No. 7-R11-MH 02045. Philadelphis, Pennsylvania: Temple University, 1966.

Symonds, P. M. The ego and the self. New York: Appleton-Century-Crofts, 1951.

Tatum, C. D. The influence of parental acceptance of selected self factors in children. (Doctoral dissertation, University of Maryland) Ann Arbor, Michigan: University Microfilm, 1957. No. 57-157.

Wheat, H. G. Foundation of school learning. New York: Alfred A. Knopf, Inc., 1955.

Wilson, J. A., Robeck, M. C., and Michael, W. B. Psychological foundations of learning and teaching. New York: McGraw-Hill Book Company, 1969.

Wilson, A. P. Personality characteristics of teachers in relation to performance in individually prescribed instruction programs. (Doctoral dissertation, Utah State University) Ann Arbor, Michigan: University Microfilms, 1970. No. 70-10, 939.

Zeaman, D., and House, B. J. Learning and transfer in mental defectives. Progress Report No. 2, 1960. University of Connecticut, Research Grant M-L099, National Institute of Mental Health.